Amendments to the Specification:

Please amend the specification as follows:

Page 7, paragraph number 2, replace this paragraph with the following.

Each of the diffracted beams 208 is transferred by a relay lens system, one embodiment of which includes a first lens 210 and a second lens 212, also shown in FIG. 2. The lenses 210 and 212, or equivalent optical elements, are arranged so that a collimated beam of light, such as 208, emerging from the center of the diffractive beam splitter 204 also passes as a collimated beam 208 through the center of the entrance pupil of focusing element 214. In a preferred embodiment, this focusing element 214 consists of a high-numerical aperture objective lens. In the implementation depicted in FIG. 2, the beams 208 are reflected into the back aperture of the focusing element 214 by a beam ~~splitter 204~~ splitter 218 whose reflective properties are chosen to direct the illuminating laser light towards the focusing element. Each collimated one of the beams 208 enters the back aperture of the objective lens (the focusing element 214) at a distinct angle which is proportional to the angle Ω, which is established by the diffractive beam splitter 204. Thus, each of the beams 208 comes to a separate focus in the focal plane of the objective lens 214 at a displacement from the center of the field of view proportional to Ω. By controlling the number N and direction Ω of the beams 208 created from the collimated laser beam 202, the diffractive beam splitter 204 controls the pattern and location of focused spots of laser light in ~~its object plane~~ the focal plane of the focusing element 214. The particular focal spot for the beam 208 is indicated at 224 in FIG. 2.

Page 12, paragraph number 1, replace this paragraph with the following.

In yet another example form of the invention shown in FIG. 4 a parallel scanned confocal microscopy system 300 employs a reflection-mode spatial light modulator 302. A beam of light 304 is incident on the face of the spatial light modulator 302 (hereinafter SLM 302). The SLM 302 encodes a phase modulation on the beam of light 304 suitable for splitting the beam of light 304 into several independent beams, only one of which 304 is shown for clarity. Each of the

beams of light 304 is directed by the same phase pattern into a distinct direction, with the depicted collimated beam 304 being directed at solid angle Ω away from an optical axis 306. Each of the collimated beams 304 created and directed by the phase pattern of the SLM 302 is transferred to the back aperture of the objective lens 214 (or other suitable focusing optical element) to create the diffraction limited focal point 224. In ~~FIG. 1~~ FIG. 4 the collimated beams 304 are transferred with two lenses 308 and 310 arranged to create a plane conjugate to the objective's back aperture at the center of the SLM 302. The optical axis 306 is thus established so that a beam of light passing from the SLM 302 along the optical axis 306 will pass through the center of the objective's back aperture and come to a focus in the middle of the objective's focal plane. A beam such as the collimated beam 304 traveling at an angle of Ω with respect to this optical axis 306 passes through the middle of the back aperture at an angle and thus forms the focal point 224 away from the center of the focal plane. The beam splitter 218 serves to direct the collimated beams 304 into the aperture of the objective lens 214.